

AERO Design Ltd.
2013 - 39th Ave. NE
Calgary, AB, T2E 6R7

AUTHORIZED RELEASE CERTIFICATE

TRANSPORT CANADA
TCCA 24-0078
AMF # 73-04

Product: Quick Release Forward Beam Part #: 69830-01

Approval #: SH00-48 Serial #: --

WO #: 2006-18 Quantity: 1

Eligibility: Bell 206L / 407 Work Status: Manufactured

Remarks: _____

I hereby certify that the product identified above has been manufactured in accordance with the applicable design data and the Canadian Aviation Regulations or applicable foreign regulations.

Dec 18/06
Date

Jeff Clarke
Inspector's Signature

AERO Design Ltd.
2013 - 39th Ave. NE
Calgary, AB, T2E 6R7

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TRANSPORT CANADA
TCCA 24-0078
AMF # 73-04

Product: Quick Release Aft Beam Part #: 69831-01

Approval #: SH00-48 Serial #: --

WO #: 2006-18 Quantity: 1

Eligibility: Bell 206L / 407 Work Status: Manufactured

Remarks: _____

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DOCUMENT CONTROL LIST

DOCUMENT NO.	DOCUMENT CONTENT	REVISION
FABRICATION DOCUMENTS		
69830 69831	Forward Beam Fabrication Aft Beam Fabrication	1 1
ENGINEERING DOCUMENTS		
ER698.02 TP698.03	Engineering Report Test Plan	0 0

R2
R2

APPROVAL: Transport Canada S. BURGON APPROVED BY: [Signature] DATE: 08 DEC 2006 S 09 JUNE 2006 THIS DOC APPROVED 26 SEPT 2006	ORIGINAL DATE: 3 May, 2006 REVISION DATE: 21 September, 2006	AERO DESIGN LTD. 2013 - 39 th Ave NE, Calgary, Alberta, T2E 6R7 Ph. (403) 250-8027 Fax. (403) 250-8333
	SHEET 1 OF 1	Quick Release Mounting Beams
	DCL698-2	Rev. 1

REVISION 2 → APPROVAL PENDING.

WORK ORDER 2006-18

Date opened: 21 August 2006

Project: Quick Release Cargo Basket Beams
Type: Bell 206L Series, 407Batch Quantity: 2 Forward Beam Ass'y (69830-01)
2 Aft Beam Ass'y (69831-01)Approval: SH00-48
Drawing List: DCL698-1

Fabrication and Assembly Drawing(s)	Description
69830, Rev. 2	Forward Beam Ass'y
69831, Rev. 2	Aft Beam Ass'y

Complete material tracking information on attached pages.

Work Order pre-completion Inspection:

Project is on Approval Limitation Record:	<u>Y</u> ✓
Document Control List revision level matches (or exceeds) STC:	<u>Y</u> ✓
Drawings revision levels match Document Control List:	<u>Y</u> ✓
Purchase order or Work order source is recorded for each part/ass'y:	<u>Y</u> ✓
Tests and inspections specifically called out on drawings are complete:	<u>Y</u> ✓
Release tags associated with all fabricated parts are attached:	<u>Y</u> ✓
All mounting hardware and supplies are included:	<u>Y</u> ✓

List all non-conformities raised: None
Inspector Signature:
Date:

Drawing: 69830 Revision 2
 Assembly: 69830-01 Forward Beam Ass'y (Quick-Release)

Qty Per	Part #	Description	Material	P.O.W.O.	Checked
2 Total	69830-01	Forward Beam Assembly			
1	69830-03	Tube	CSA G40.21 50W, 1x2x0.125 tube	6055	
1	69830-04	Tube	CSA G40.21 50W, 1x2x0.125 tube	6055	
2	69830-05	Bushing	1018 Mild Steel, 5/8" Rod	951108	
1	69830-06	Strap	4130 Steel, 0.125" Sheet	6031	
1	69830-07	Block	1018 Mild Steel, 1/4" Sqr. Rod	4044	
1	69830-09	Cap	1018 Mild Steel, 0.025" Sheet	9506142	
1	69830-10	Cap	1018 Mild Steel, 0.025" Sheet	9506142	
1	69830-11	Guide	304 Stainless, 3/4" x 0.058" Rnd. Tube	6049	
1	69830-21	Stop	6061-T6 Aluminum, 5/8" Rod	6061	
1	69830-22	Knob	6061-T6 Aluminum, 3/4" Rod	3005	
1	69830-23	Spring	15mm x 70 mm Spring	6063	
1	#10-32	Screw	Stainless Steel, Commercial	6064	
1	MS21044C3	Nut		1013	

Processes	Per	Mat'ls Used	Inspection	Signature
Welding	AMS 2685C	Welding Rod ER70S-2, AMS 5680A		<i>David King</i>
Powder Coat	Drawing 69830	Po 6087		<i>Jeff Clarke</i>
Final Inspection	Drawing 69830			<i>Jeff Clarke</i>

Tag incomplete parts with Work Order # when stored between processes.

Tag complete parts / assemblies with Release Tag prior to storage.

Drawing: 69831 Revision 2
 Assembly: 69831-01 Aft Beam Ass'y (Quick-Release)

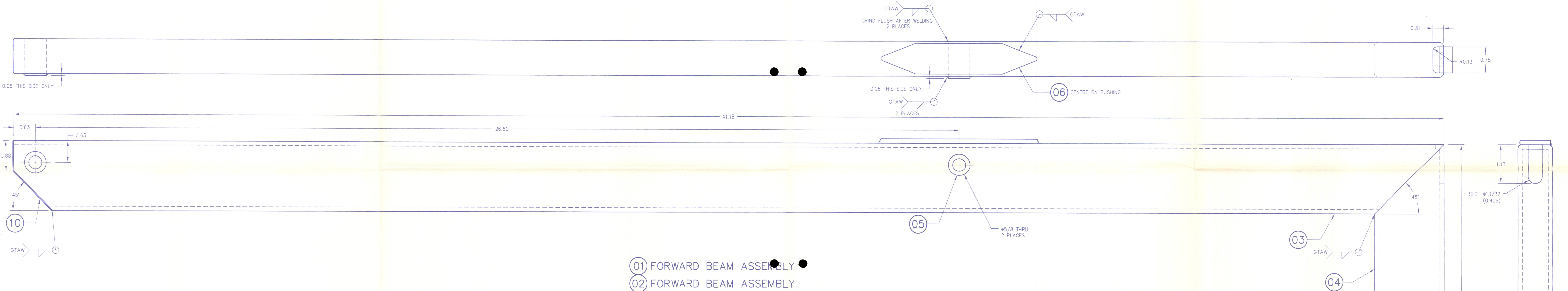
Qty Per	Part #	Description	Material	P.O./W.O.	Checked
2 Total	69831-01	Aft Beam Assembly			
1	69831-03	Tube	CSA G40.21 50W, 1x2x0.125 tube	6055	
1	69831-04	Tube	CSA G40.21 50W, 1x2x0.125 tube	6055	
1	69831-05	Tube	CSA G40.21 50W, 1x2x0.125 tube	6055	
2	69830-05	Bushing	1018 Mild Steel, 5/8" Rod	951108	
1	69830-06	Strap	4130 Steel, 0.125" Sheet	6031	
1	69830-07	Block	1018 Mild Steel, 1/4" Sqr. Rod	4044	
1	69830-09	Cap	1018 Mild Steel, 0.025" Sheet	9506142	
1	69830-10	Cap	1018 Mild Steel, 0.025" Sheet	9506142	
1	69830-11	Guide	304 Stainless, 3/4" x 0.058" Rnd. Tube	6049	
1	69830-21	Stop	6061-T6 Aluminum, 5/8" Rod	6061	
1	69830-22	Knob	6061-T6 Aluminum, 3/4" Rod	3005	
1	69830-23	Spring	15mm x 70 mm Spring	6063	
1	#10-32	Screw	Stainless Steel, Commercial	6069	
1	MS21044C3	Nut		1013	

Processes	Per	Mat'ls Used	Inspection	Signature
Welding	AMS 2685C	Welding Rod ER70S-2, AMS 5680A		<i>[Signature]</i>
Powder Coat	Drawing 69831	P0 6087		<i>[Signature]</i>
Final Inspection	Drawing 69831			<i>[Signature]</i>

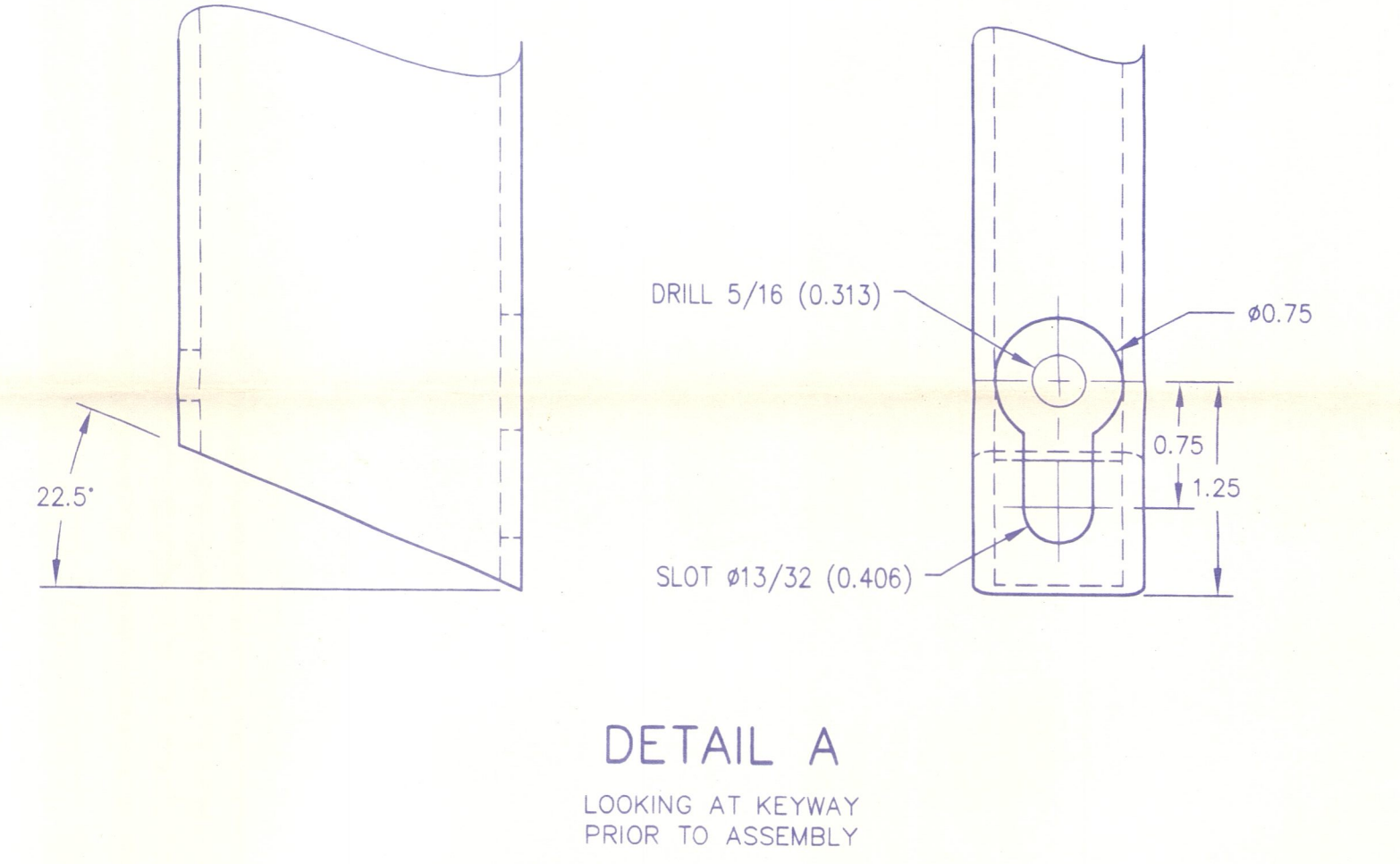
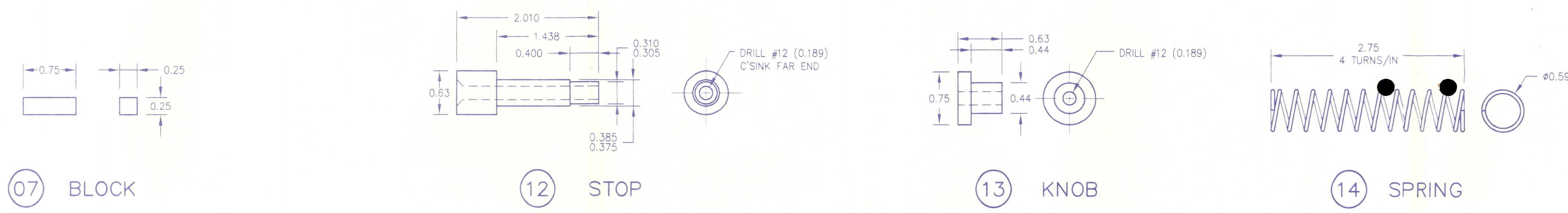
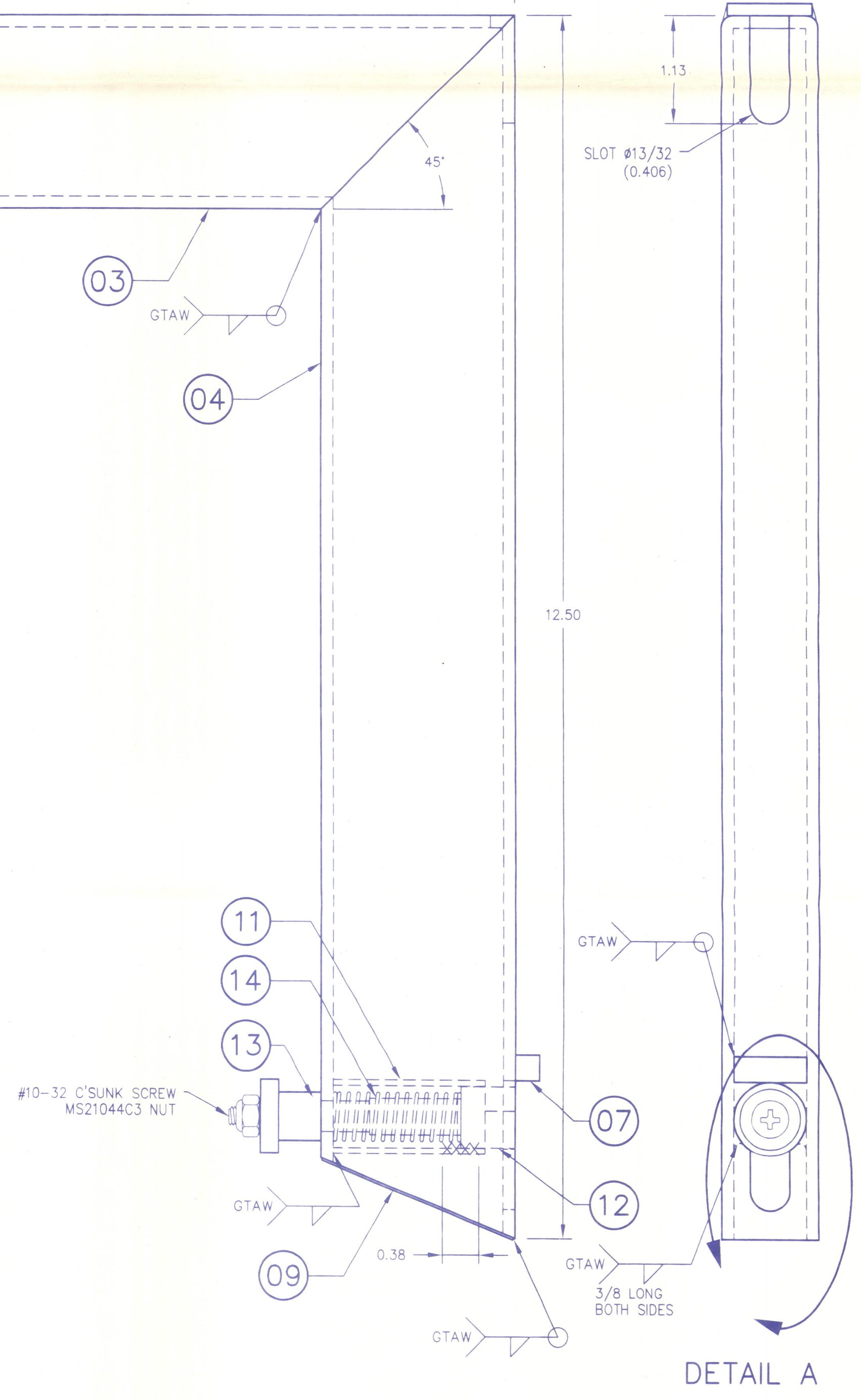
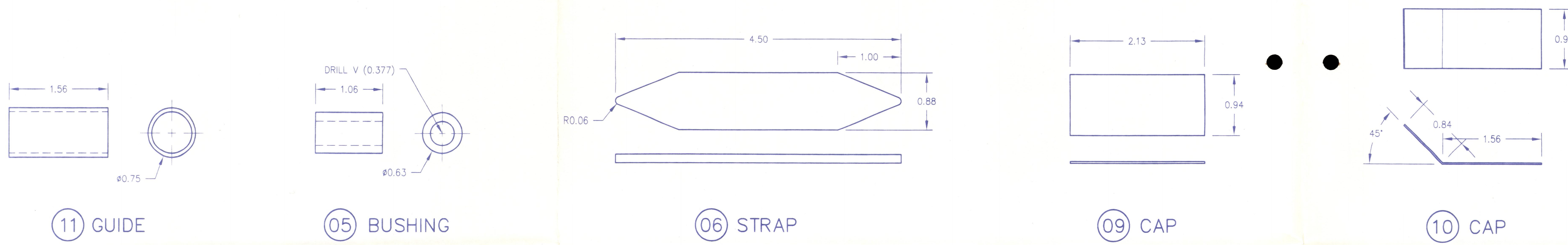
Tag incomplete parts with Work Order # when stored between processes.

Tag complete parts / assemblies with Release Tag prior to storage.

THIS DRAWING CONTAINS INFORMATION AND DATA WHICH IS PROPRIETARY TO AERO DESIGN LTD. THIS DRAWING OR ANY PORTION THEREOF, MAY NOT BE REPRODUCED, COPIED, OR DUPLICATED IN ANY MANNER, NOR USED FOR MANUFACTURING WITHOUT THE WRITTEN CONSENT OF AERO DESIGN LTD. BY ACCEPTING THIS DRAWING FOR REFERENCE, THE RECIPIENT AGREES TO HOLD AERO DESIGN LTD. HARMLESS FROM THE USE, OR MISUSE, OF THIS DRAWING OR THE INFORMATION CONTAINED THEREON.			
REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
1	BEAM MODIFIED TO ACCOMMODATE SLIDING DOOR	BJC	06/09/2006
2	BEAM MODIFIED FOR 2 KEYWAY ATTACHMENT	BJC	09/11/2006



01 FORWARD BEAM ASSEMBLY
02 FORWARD BEAM ASSEMBLY



- NOTES
- REMOVE ALL BURRS AND BREAK SHARP EDGES.
 - WELDING OF STEEL TO BE COMPLETED BY GTAW METHOD TO AMS2685C. WELDING ROD SHALL CONFORM TO ER70S-2 OR EQUIVALENT FOR 4130/HSS STEEL. WELDING ROD SHALL CONFORM TO ER308L OR EQUIVALENT FOR STAINLESS STEEL.
 - ALL STEEL PARTS TO BE THOROUGHLY DEGREASED AND POWDER COATED PRIOR TO INSTALLATION.
 - FORWARD BEAM ASSEMBLY (99830-02) MAY BE USED AS A DIRECT REPLACEMENT FOR FORWARD BEAM ASSEMBLY (99830-01).

QTY	QTY	PART NO.	ITEM	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE
1	1	MS21044C3	NUT				
1	1	#10-32	C'SUNK SCREW		STAINLESS STEEL	COMMERCIAL	
1	1	69830-23	14	SPRING		COMMERCIAL	15mm X 70mm SPRING
1	1	69830-22	13	KNOB	6061-T6 ALUMINUM	QQ-A-200/8	#0.75 ROD
1	1	69830-21	12	STOP	6061-T6 ALUMINUM	QQ-A-200/8	#0.625 ROD
1	1	69830-11	11	GUIDE	304 STAINLESS STEEL	ASTM A269	#0.75 X 0.058 RND. TUBE
1	1	69830-20	10	CAP	321 STAINLESS COND. A	AMS 5510	0.025 SHEET
1	1	69830-10	10	CAP	4130 STEEL COND. N	MIL-S-18729	0.025 SHEET
1	1	69830-19	09	CAP	321 STAINLESS COND. A	AMS 5510	0.025 SHEET
1	1	69830-09	09	CAP	4130 STEEL COND. N	MIL-S-18729	0.025 SHEET
1	1	69830-07	07	BLOCK	304 STAINLESS STEEL	ASTM A479	0.25 SDR ROD
1	1	69830-16	06	STRAP	4130 STEEL COND. N	MIL-S-5059	0.100 SHEET
1	1	69830-06	06	STRAP	4130 STEEL COND. N	MIL-S-18729	0.125 SHEET
1	1	69830-15	05	BUSHING	304 STAINLESS STEEL	ASTM A479	#0.625 ROD
1	1	69830-05	05	BUSHING	MILD STEEL	ASTM A554	#0.625 ROD
1	1	69830-14	04	TUBE	304 STAINLESS STEEL	ASTM A554	1 X 2 X 0.125 TUBE
1	1	69830-04	04	TUBE	HSS STEEL	CSA G40.21 50W	1 X 2 X 0.125 TUBE
1	1	69830-13	03	TUBE	304 STAINLESS STEEL	ASTM A554	1 X 2 X 0.125 TUBE
1	1	69830-03	03	TUBE	HSS STEEL	CSA G40.21 50W	1 X 2 X 0.125 TUBE
1	1	69830-02	02	FORWARD BEAM ASSEMBLY (STAINLESS STEEL)			
1	1	69830-01	01	FORWARD BEAM ASSEMBLY			
QTY	QTY	PART NO.	ITEM	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE

LIST OF MATERIALS - STEEL BEAM

APPROVALS	DATE		
DRAWN: JEFF CLARKE	06 APR 2006		
CHECKED: E. BURGOIN			
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ON:			
DECIMALS	ANGLES		
X.XXX ±0.010	±1/2°		
X.XX ±0.03			
X.X ±0.1			
SCALE 1 : 1	DWG. SIZE	DWG. NO.	REV.
SHEET 1 OF 1	A0	69830	2

AERO DESIGN LTD.
CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 280M
2013 - 99TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7
tel: (403) 250-8027 fax: (403) 250-8335 aérodesign@aerolux.net

BELL 206L / 407
QUICK RELEASE CARGO BASKET
FORWARD BEAM FABRICATION

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
1	BEAM MODIFIED TO ACCOMODATE SLIDING DOOR	BJC	06/09/2006
2	BEAM MODIFIED FOR 2 KEYWAY ATTACHMENT	BJC	07/11/06

DETAIL A
LOOKING AT KEYWAY
PRIOR TO ASSEMBLY

- NOTES
1. REMOVE ALL BURRS AND BREAK SHARP EDGES.
 2. WELDING OF STEEL TO BE COMPLETED BY GTAW METHOD TO AWS2695C.
WELDING ROD SHALL CONFORM TO ER70S-2 OR EQUIVALENT FOR A130/HSS STEEL.
WELDING ROD SHALL CONFORM TO ER308L OR EQUIVALENT FOR STAINLESS STEEL.
 3. ALL STEEL PARTS TO BE THOROUGHLY DEGREASED AND POWDER COATED PRIOR TO ASSEMBLY.
 4. AFT BEAM ASSEMBLY (69831-02) MAY BE USED AS A DIRECT REPLACEMENT FOR AFT BEAM ASSEMBLY (69831-01).

Q2	Q1	QTY	PART NO.	ITEM	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE
1	1		MS21044C3	1/4"UT				
1	1		#10-32	C'SUNK SCREW	STAINLESS STEEL			
1	1		69830-23	15	KNOB	COMMERCIAL	15mm X 70mm SPRING	
1	1		69830-22	14	SPRING	Q0-A-200/8	#0.75 ROD	
1	1		69830-21	13	STOP	6061-T6 ALUMINUM	#0.625 ROD	
1	1		69830-11	12	GUIDE	304 STAINLESS STEEL	ASTM A269	#0.75 X 0.058 ROD, TUBE
1	1		69830-20	11	CAP	321 STAINLESS COND.	A AMS 5510	0.025 SHEET
1	1		69830-10	10	CAP	4130 STEEL COND. N	MIL-S-18729	0.025 SHEET
1	1		69830-19	10	CAP	321 STAINLESS COND. N	A AMS 5510	0.025 SHEET
1	1		69830-09	10	CAP	4130 STEEL COND. N	MIL-S-18729	0.025 SHEET
1	1		--	09--				
1	1		69830-07	08	BUCK	304 STAINLESS STEEL	ASTM A479	0.25 SDR ROD
1	1		69830-16	07	STRAP	304 STAINLESS STEEL	MIL-S-5059	0.100 SHEET
1	1		69830-06	07	STRAP	4130 STEEL COND. N	MIL-S-18729	0.125 SHEET
1	1		69830-15	06	BUSHING	304 STAINLESS STEEL	ASTM A479	#0.625 ROD
1	1		69830-10	06	BUSHING	MILD STEEL	1010/1020	#0.625 ROD
1	1		69831-14	05	TUBE	304 STAINLESS STEEL	ASTM A554	1 X 2 X 0.125 TUBE
1	1		69831-05	05	TUBE	HSS STEEL	CSA G40.21 SOW	1 X 2 X 0.125 TUBE
1	1		69831-14	04	TUBE	304 STAINLESS STEEL	ASTM A554	1 X 2 X 0.125 TUBE
1	1		69831-04	04	TUBE	HSS STEEL	CSA G40.21 SOW	1 X 2 X 0.125 TUBE
1	1		69831-13	03	TUBE	304 STAINLESS STEEL	ASTM A554	1 X 2 X 0.125 TUBE
1	1		69831-03	03	TUBE	HSS STEEL	CSA G40.21 SOW	1 X 2 X 0.125 TUBE
1	1		69831-02	02	RAFT ASM ASSEMBLY (STAINLESS STEEL)			
1	1		69831-01	01	RAFT ASM ASSEMBLY			

APPROVALS		DATE	
DRAWN:	E. JUFF CLARKE	06 APR 2006	
CHECKED:	E. BURGIN		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON:			
DECIMALS		ANGLES	
X.XXX ±0.010		°	
X.X ±0.03		±1/2°	
X.X ±0.1			
<div>CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS: DAR 290M 2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7 tel: (403) 256-8827 (403) 256-8332 aerodesigns@csplanet.net</div>		BELL 407 / 407	
		QUICK RELEASE CARGO BASKET AFT BEAM FABRICATION	
SCALE: 1 OF 2		DWG. NO.	REV.
SHEET 1 OF 1		A0	69831 2